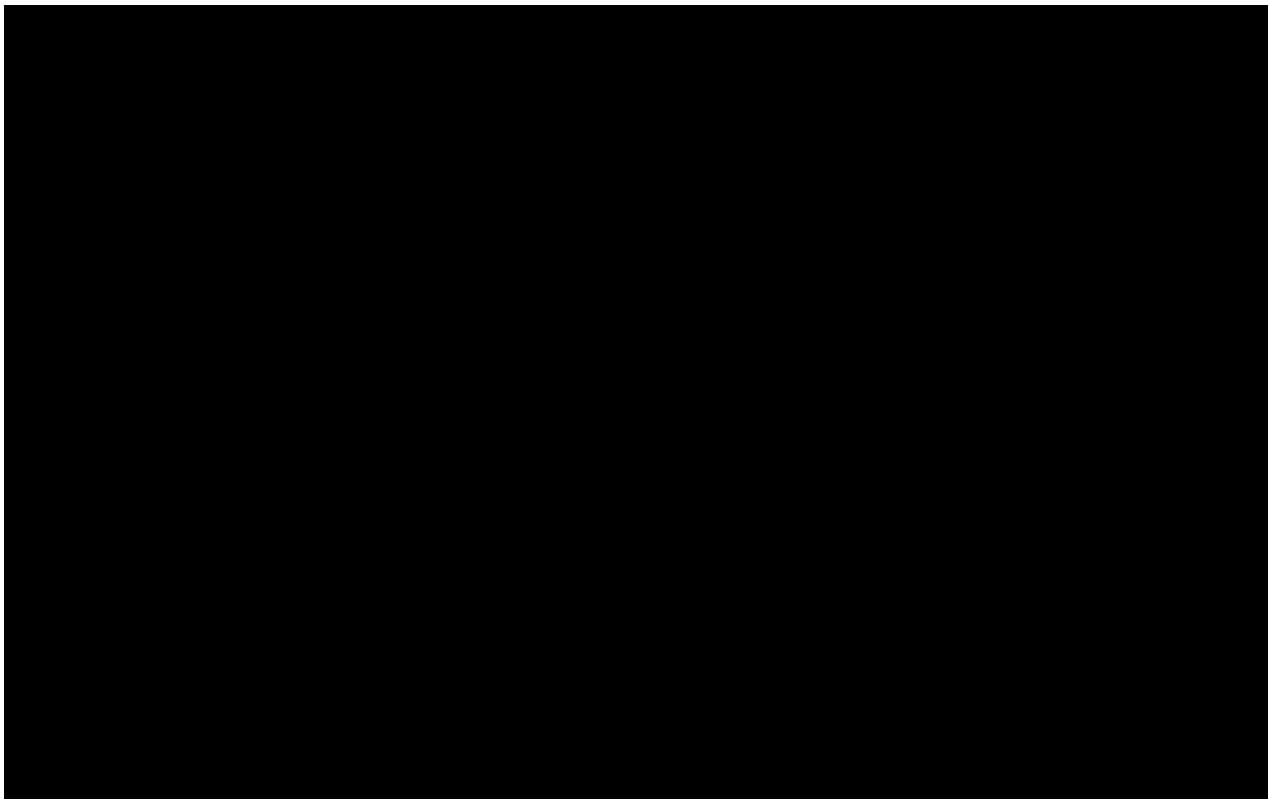


**Based on the production volume for [REDACTED], [REDACTED], and estimated use in the US [REDACTED]. The rest will be exported out of the US.**

The new chemical substance (NCS) will be used as an additive to [REDACTED] solventless release coating (SL RLC) formulations. A typical [REDACTED] SL RLC formulation to be used with the NCS will be similar to [REDACTED] release coating system (Technical Data Sheet enclosed). It is a multicomponent system that consists of a base polymers, a catalyst, a crosslinker, and an inhibitor. The NCS will be premixed with the base polymer and the inhibitor, the NCS content in the pre-mixed product will be about [REDACTED] by weight. The final mixing of all components occurs at the customer site; the concentration of the NCS in the final formulation will be less than [REDACTED].

The manufacturers of adhesive tapes will use Momentive SL RLC products on a variety of substrates onto which labels of various materials are applied/ printed, so as to facilitate peeling off the labels. It is important to secure the RLC onto the substrate it is applied on, so as to withstand the label being pulled away - and avoid the RLC being pulled away with the label itself off the substrate it was applied on to. This effect is referred to as "anchorage". The NCS's role in the RLC formulation is that it significantly improves anchorage.

The [REDACTED] SL RLC component, containing [REDACTED] of the NCS by weight, will be packaged into drums and supplied to manufacturers of adhesive tapes together with other formulation components. From the incoming drums, the NCS containing [REDACTED] SL RLC formulation component will be transferred to the day storage tanks. From the day storage tanks, the NCS containing [REDACTED] SL RLC formulation component will be transferred into a mixer, where it will be mixed with other coating components to make the final formulation. The final formulation will be transferred into a formulation bath, from which it will be transferred onto a carrier (paper, plastic film, cloth, foam, or foil) using a web or roll coater, and finally subjected to a thermal cure. During the curing process the NCS will chemically react with other components of the [REDACTED] SL RLC formulation, and therefore become "part of an article" and no longer exist as a discrete chemical component.



**Per year:**

██████ of the NCS, ██████ in the SL RLC product, ██████, packed in 200 kg drum; ██████ drums/year; ██████ drums/year shipped to about ██████ in the US.

**██████ drums per site per year**

Workers at customer facilities will be exposed to the NCS during the time that NCS containing product is transferred from original shipping containers to the bulk storage tank. The transfer process will typically be accomplished with the use of a pump, thereby minimizing the potential for dermal exposure. From the bulk storage tank, the NCS containing product will be transferred (metered) to a mixer, and then to a formulation bath. The roll of a carrier will be dipped into the formulation bath in a continuous motion, and the layer of coating will be subjected to thermal cure. During these activities, workers will typically wear gloves, goggles, and aprons in an area that will be serviced by local exhaust ventilation.

During mixing (compounding) operations, there will be some minimal potential for inhalation exposure. The same potential for worker inhalation exposure will also exist at the time the formulated coating system containing the NCS is transferred to the formulation bath. However, due to the low vapor pressure of the NCS, which is a polymer, and the fact that these stations will also be serviced by a vapor hood, these exposure potentials are effectively eliminated. Otherwise, workers in these areas will wear gloves, goggles, and aprons.

During equipment cleaning operations, which are expected to be infrequent, workers will wear gloves, goggles and aprons in an area that is serviced by local exhaust ventilation. Since the NCS and formulated coating system that contain the NCS are not soluble in water, it is reasonable to assume that equipment will be cleaned with either next coating system or solvents that will likely be collected and sent off site for incineration.

Empty drums will be disposed through the certified waste drum reclaiming facility.

**Exposure, Activity A:**

For a regular worker, the connection or disconnection would take no more than one minute. Let's presume 10 min per drum.

The drums are placed in corresponding pumping equipment, opened, and then fitted with the pump and sealed

The metering equipment (containing the pump) and the dispensing unit are usually not washed, but rather purged with the next product they want to run.

██████, 10 min each; ██████; ██████ drums per site per year, 15 min per site per day

**PPE: chemical resistant gloves and clothing, protective eyewear, hard hats, safety shoes**

**Engineering controls: proper ventilation with thermal oxidizers at the end of the ducts; spill containment; closed systems for material transfer.**

**Exposure, Activity B:**

Fully automated, no operator exposure

**Exposure, Activity C:**

Fully automated, no operator exposure

**Exposure, Activity D:**

Fully automated, no operator exposure

**Release point 1:**

6 kg (about 3%) RLC per drum, [REDACTED] of pure NCS per drum, [REDACTED] drums per site per year, about [REDACTED] drums per site per day, [REDACTED] NCS per site per day, [REDACTED], [REDACTED] yearly.

Release: POTW

**Release point 2:**

The metering equipment and the formulation bath are usually not washed, but rather purged with the next product they want to run.

When production lines and mixing equipment are washed (annually or quarterly), the typical solvents are toluene, xylene, ethyl acetate, naphtha. The washes are incinerated.